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618 heIleAspIleSerSerLeuHisTyTrpLeuMetGluThrAlaAsnGly 634  
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 2417 CCGGATGCTGCTTACAGAGCGTGTGGTGATGCCACAGCCCAT 2466  
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seq\_documentation\_block:  
Sequence 15, Application US/09376770  
GENERAL INFORMATION:  
APPLICANT: Mordin, Andrew  
TITLE OF INVENTION: CHLAMYDIA ANTIGENS AND CORRESPONDING DNA FRAGMENTS  
FILE REFERENCE: 19721-006  
CURRENT APPLICATION NUMBER: US/09/376,770  
EARLIER APPLICATION NUMBER: 60/097,187  
EARLIER FILING DATE: 1998-08-20  
EARLIER APPLICATION NUMBER: 60/097,188  
EARLIER FILING DATE: 1998-08-20  
EARLIER APPLICATION NUMBER: 60/097,189  
EARLIER FILING DATE: 1998-08-20  
EARLIER APPLICATION NUMBER: 60/097,190  
EARLIER FILING DATE: 1998-08-20  
EARLIER APPLICATION NUMBER: 60/097,195  
EARLIER FILING DATE: 1998-08-20  
EARLIER APPLICATION NUMBER: 60/097,196  
EARLIER FILING DATE: 1998-08-20  
EARLIER APPLICATION NUMBER: 60/097,197  
EARLIER FILING DATE: 1998-08-20  
EARLIER APPLICATION NUMBER: 60/097,191  
EARLIER FILING DATE: 1998-08-27  
NUMBER OF SEQ ID NOS: 16  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 15  
LENGTH: 2957  
TYPE: DNA  
ORGANISM: Chlamydia sp.  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (101)..(2854)  
US-09-376-770-15  
  
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Quality: 2006.00 Length: 948  
Ratio: 2.810 Gaps: 20  
Percent Similarity: 75.316 Percent Identity: 45.570  
  
alignment\_block:  
US-09-428-122-2 x US-09-376-770-15 ..  
  
Align seg 1/1 to: US-09-376-770-15 from: 1 to: 2957  
  
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101 ATGACATGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCC 150  
17 cleusernettle.....AlaThrGluThrValLeuAspSer 30  
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151 TCTTTAATGAGTCTTCTGCAGATGCTGCCGATCTCAGATTCAGGAGTC 200  
30 erAlaSerPheAspPolYasn...LysasnGlyAsnPheseValArgGlu 45  
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201 GTGACAGTTATATGATGATGATGATGATGATGATGATGATGATGATG 250  
46 SerGlnGluAspAla...GlyThrThrTyLeuPheLysGlyAsnValTh 51  
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61 rLeuGluAsnIleProGlyThrGlyThrAlaIleThrLysSerCysPhe 78  
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301 GATAGGCCAA...GCAGGAAACAAACAGCTTAACCAAGATTGTTT 347  
78 snAsnThrLysGlyAspLeuThrPheThrGlyAsnGlyAsnSerLeuLeu 94  
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348 CTACACCTGACAGAAATCTTACCTTACGGAACGCAATTTCTCTCAT 397  
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398 TTGACAAATATATTCTGCTACCTGTTGACAGTGTGTTGATCAATAC 447  
111 rValValAspLysSerThrThrPheIleGlyPheSerSerLeuSerPhe 128  
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448 AGCAGCTCTGGATTTACGAATTTCTCAGATTTTCACTCTTCGATGC 497  
128 leAlaSerProGlySerSerIleThrThrGlyLysGlyAlaValSerCys 144  
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498 TTGACAGCTCTAGG.....ACCACAGGTAAGAGCCATTAATAAT 538  
145 SerThrGlySerLeuSerLeuThrLysAsnValSerLeuLeuPheSer 151  
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539 ACCGATGT...CTGGTGTTCAGATATAGGAAATCTTGAATTAAGA 585  
161 sasnPheseThrAspAsnGlyAlaIleThrAlaLysThrLeuSerL 178  
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585 AATGCTCTTACGAAATGGGAGCCATCATGCAAGACTTTGTTCT 635  
178 euThrGlyThrThrThrSerAlaLeuPheSerGluAsnThrSerLys 194  
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636 TCAGCTGAGTACGCGGTTTGTGAGCTTCTTGCATATAGCTGCGCAA 685  
195 LysGlyGlyAlaIleGlnThrSerAspAlaLeuThrIleThrGlyAsnG 211  
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686 CAAGGGGAGCATCTATGCTTCTGCTGACTGTGATTTCTGACAATGC 735  
211 nGlyValAserPheSerAspAsnThrSerAspSerGlyAlaAlaI 228  
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736 AGCAATCTTACGCTTCGGAACACACAGTCCGACACATCAGAGCGCGCA 785  
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245 IleAspAsnLysValThrGlyAlaSerSerThrThrGlyAsnMetSe 251  
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836 GATGCTGCAAGCAACT.....ACAA 858  
261 rGlyGlyAlaIleCysAlaTyLys.....ThrSerThrAspThrLysV 276  
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859 TGCGGAGCTATGATGATGATGATGATGATGATGATGATGATGATG 908  
276 alThrLeuThrGlyAsnGlnMetLeuLeuPheSerAsnAsnThrSerThr 292  
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909 TGACTCTTTCAGGAATGAGAGCTCATTTCTGAAATACACACAGCA 952  
293 ThrAlaGlyGlyAlaIleTyValLysLysLeuGluLeuAlaSerGly 308  
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959 AATAGTGGAGGTGCGATTAATACCAAAATGCGTGTATCTCCAGAGCG 1008  
309 GlyLeuThrLeuPheSerArgAsnSerValAsnGlyThrAlaPol 325  
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1009 AGCAGAGATGTTATTTTCTAACACAAACCTCGAATGCTACT...CCTA 1055

RESULT 12

P71133 PRELIMINARY; PRT; 846 AA.

AC P71133;

DT 01-FEB-1997 (TREMBLERel. 02, Created)

DT 01-FEB-1997 (TREMBLERel. 02, Last sequence update)

DE 01-MAY-2000 (TREMBLERel. 13, Last annotation update)

DE POMP91B PRECURSOR.

OS Chlamydomonila psittaci.

OC Bacteria; Chlamydiales; Chlamydiaceae; Chlamydomonila.

RN (1)

RP SEQUENCE FROM N. A.

RC STRAIN-OVINE ENZOOTIC ABORTION ISOLATE S26/3;

RX MEDLINE; 96406378.

RA Longbottom D., Russell M., Jones G.E., Iainson F.A., Herring A.J.;

RT "Identification of a multigene family coding for the 90 kDa proteins

RL of the ovine abortion subtype of Chlamydia psittaci.";

RL FEBS Microbiol. Lett. 142:277-281(1996).

RN [2]

RP SEQUENCE FROM N. A.

RC STRAIN-OVINE ENZOOTIC ABORTION ISOLATE S26/3;

RX MEDLINE; 98187897.

RA Longbottom D., Russell M., Dunbar S.M., Jones G.E., Herring A.J.;

RT "Molecular cloning and characterization of the genes coding for the

RT Chlamydia psittaci subtype of 90-kilodalton envelope proteins from the

RL infect. Immun. 66:1317-1324(1998).

DR EMBL; U65943; AAC15923.1;

KW SIGNAL.

FT SIGNAL.

FT CHAIN 17 846 POMP91B.

SO SEQUENCE 846 AA; 90834 MW; 4CDC31DC03C2964E CRC64;

Query Match 33.6%; Score 1604.5; DB 2; Length 846;

Best Local Similarity 38.7%; Pred. No. 1.8e-82;

Matches 368; Conservative 140; Mismatches 269; Indels 173; Gaps 26;

QY 23 TETVLDSSASFDGN-KNGNFSVRESQEDAGTYLFRGNVTLNPTGTATKSCFNNRK 81

DB 26 TNETLSSDSYNGNVTSDSEFEVKET--TSGAITCEGNVCI-SYAGKDSPLNKSCSEFTT 82

QY 82 GDLTFGNGNSILFOTVVDAGTAVAGAVNSVYDKSTTFITGFS--SLSTFASPGSSITITGK 139

DB 83 ENSTFIGNGTITLFDNITTOSSHGPAISVSGTNKTLIDISGFSLFCSCAYCCPG--TTGY 139

QY 140 GAVSCSTGSLITLKNVSLFSKNFSTDNGCAITAKTILSTGTMSALFSENTSKKGAI 199

DB 140 GAIO-TKGTITLKNSSLVFHKNCSTAECAIOCK----- 173

QY 200 QTSDALITITGNOGEVFSFSDNTSSDSGAIFTEASVTISNNAKVSFDNKVTGASSSTGCD 259

DB 174 -----SSSSTAE 180

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DB 181 LK-----LENNKNLVFSENSKKEKGAITADLTIVSGGPTLFSNNSVS 224

QY 320 GGTAPKGAIAIEDS-GELSLADSGDIVFLGNTVST---TGTNNSIDLGTSAKMTA 375

DB 225 HNSSPKGAICIKDSDECSLTANLGDITFDGNKIIITNGSPPLVTRNSIDLSGKFTK 284

QY 376 LRSAGRAIYFDPPI-TTGSSTVTDVLYKXENPADSALOYTNIIFTGKEKLETAADS 434

DB 285 LNAKEGFIFFYDPIANTGSGTEL-----ELNKTESDIT--YTGKIVFSGEKLSDDEKTVP 338

QY 435 KNLTKLQPVTLSSGTLSLKHGVTLOTAFTQOADSRLMDVGTLE----PADSTIN 490

DB 339 ANLSYFKQPLKIGAGSLVLDGVTLEAKKITQTKGSTVYMDLGTTLQTPSSSGETITLT 398

QY 491 NLVINISSI---DGAKKAKIETAKSKNLTSGTITLDPPTGFYENSLRNPOSYDILE 547

DB 399 NLDININSLGGGGTAPAKLATNTASOAISIA-AVNLVNTDSNTIEDPLTSKSFSAI- 456

QY 548 LKASGTVTSTAVTPDPPIGEKF---HYGQGTWGPVYVGTGAST---TAFENMKTKGYI 600

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C